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PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants :	Dror Segal <i>et al.</i>	Confirm. No.	5534
Serial No. :	09/774,768	Examiner	Elizabeth H. Rosen
Filed :	January 31, 2001	Group Art Unit	3694
For :	VIRTUAL TRADING FLOOR SYSTEM AND METHOD		

AMENDMENT

**FILED ELECTRONICALLY**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Madam:

In view of the decision of the Board of Patent Appeals and Interferences dated March 2, 2012, Applicants submit the following Amendment for entry into the file of the above-referenced patent application.

This Amendment is being filed to expedite resolution of the above-referenced patent application and to place this application in condition for allowance, and does not constitute an acquiescence to any prior art or other rejections identified by the Examiner.

**Amendments to the Claims** begin on page 2 of this paper.

**Remarks** begin on page 12 of this paper.

**Amendments to the Claims**

1. (Previously Presented) A method for managing trading and system activity in a trading exchange, the method comprising

at a centralized location, providing a visual display of trading exchange activity including systems activity and trading activity to a trading exchange supervisor or manager; and

providing an interactive decision support interface coupled to the visual display of trading exchange activity;

wherein providing the visual display of trading exchange activity comprises:

maintaining data representing a three dimensional model of said exchange's trading areas, said model including surfaces;

receiving and maintaining in a computer memory data representing trading exchange activity;

generating a two dimensional display representing an aspect view of said three dimensional model selected via the interactive decision support interface, said two dimensional display including perspective views of at least some of said surfaces of said model;

generating alphanumeric images of selected data representing trading exchange activity; and

mapping said alphanumeric images onto selected ones of said perspective views.

2. (Original) A method as specified in claim 1 wherein there is provided the further steps of:

changing said selected aspect view of said three dimensional model;

generating a further two dimensional display representing said changed aspect view, said further two dimensional display including further perspective views of at least some of said surfaces of said model; and

mapping said alphanumeric images onto selected ones of said further perspective views in said further two-dimensional display.

3. (Original) A method as specified in claim 1 wherein portions of said two dimensional display are selectable, said selectable display portions being operable when selected for displaying further data correlated to said selectable display portions.

4. (Original) A method as specified in claim 3 wherein at least some of said selectable display portions comprise said perspective aspect views, and wherein said further data is correlated to data represented by said alphanumeric images mapped onto said perspective aspect views.

5. (Previously Presented) A method for displaying data representing the operation of an exchange having a trading area including a plurality of trading posts whereat selected securities are traded, comprising:

at a centralized location, providing a visual display of trading exchange activity including systems activity and trading activity to a trading exchange supervisor or manager; and

providing an interactive decision support interface coupled to the visual display of trading exchange activity,

wherein providing the visual display of trading exchange activity comprises:

maintaining data representing a three-dimensional model of said exchange trading area, said model including model portions representing said trading posts;

receiving and maintaining in a computer memory data representing trading of said securities; and

generating a two dimensional display representing an aspect view of said three dimensional model selected via the interactive decision support interface, said selected aspect view including one or more of said model portions representing said trading posts, said model portions having selectable parts being selectable and operative when selected to display further data from said computer memory correlated to said selected parts.

6. (Original) A method as specified in claim 5, wherein said model portions representing said trading posts include surfaces and wherein said step of generating a two-dimensional display further comprises:

generating alphanumeric images relating to securities traded at a selected trading post and mapping said alphanumeric images into selected ones of said surfaces in said two-dimensional display, and wherein said surfaces being operative when selected to display further data correlated to said related securities.

7. (Original) A method as specified in claim 4, wherein said alphanumeric images comprise identification of said securities.

8. (Original) A method as specified in claim 5, further comprising:

analyzing said data representing trading of said securities and identifying exceptional conditions relating thereto, generating image portions representing said exceptional conditions, and displaying said exceptional condition image portions in said two-dimensional display in correlation with display of model portions representing said trading posts at which said securities are traded.

9. (Original) A method as specified in claim 8 wherein said exceptional condition image portions are selectable and operative when selected to display further data concerning said exceptional condition.

10. (Previously Presented) A method as specified in claim 5, further comprising:

monitoring data processing systems used in said exchange;  
identifying exceptional conditions in said data processing systems and the locations of said exchange effected by said exceptional conditions; and  
generating image portions representing exceptional conditions of said data processing systems and displaying said exceptional condition image portions in said two dimensional display in correlation with said location of said exchange.

11. (Currently Amended) A system for managing trading and system activity in a trading exchange, the system comprising:

at a centralized location, a visual display of trading exchange activity including systems activity and trading activity;

an interactive decision support interface coupled to the visual display of trading exchange activity; and

a computer system, configured and programmed to:

- (a) maintain data representing a three dimensional model of said exchange trading area, said model including surfaces;
- (b) receive data from said at least one data source;
- (c) format and normalize said data to provide formatted data of a predetermined format;
- (d) store and update said formatted data in at least one memory area;
- (e) generate a two dimensional display image of a three dimensional model from an aspect view of said three dimensional model selected via the interactive decision support interface, said display image having perspective views of at least some of said surfaces of said model;
- (f) generate alphanumeric images of selected data;
- (g) map said alphanumeric images onto selected ones of said perspective views; and
- (h) receive commands designating said aspect view and for retrieving further data and updating said display image.

12. (Original) A system for providing an interactive display of data as specified in claim 11 wherein the computer system is further configured and programmed to:

change said selected aspect view of said three dimensional model;

generate a further two dimensional display representing said changed aspect view, said further two dimensional display including further perspective views of at least some of said surfaces of said model; and

map said alphanumeric images onto selected ones of said further perspective views in said further two-dimensional display.

13. (Original) A system for providing an interactive display of data as specified in claim 11 wherein portions of said two dimensional display are selectable, said selectable display portions being operable when selected for displaying further data correlated to said selectable display portions.

14. (Original) A system for providing an interactive display of data as specified in claim 13 wherein at least some of said selectable display portions comprise said perspective aspect views, and wherein said further data is correlated to data represented by said alphanumeric images mapped onto said perspective aspect views.

A system for displaying data representing the operation of an exchange

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15. (Currently Amended) A system for managing trading and system activity in displaying data representing the operation of a trading exchange having a trading area including a plurality of trading posts whereat selected securities are traded, the system comprising:

a visual display of trading exchange activity including systems activity and trading activity data representing the operations of the trading area including a plurality of trading posts whereat selected securities are traded,

an interactive decision support interface coupled to the visual display of trading exchange activity; and

a computer system, configured and programmed to:

maintain data representing a three-dimensional model of said trading area, said model including model portions representing said trading posts;

receive and maintain in a computer memory data representing trading of said securities;

generate a two dimensional display representing an aspect view of said three dimensional model selected via the interactive decision support interface, said selected aspect view including one or more of said model portions representing said trading posts, said model portions having selectable parts being selectable and operative when selected to display further data from said computer memory correlated to said selected parts.

16. (Original) A system for displaying data representing the operation of an exchange as specified in claim 15, wherein said model portions representing said trading posts include surfaces and wherein the computer system is further configured and programmed to:

generate alphanumeric images relating to securities traded at a selected trading post and

map said alphanumeric images into selected ones of said surfaces in said two-dimensional display, and wherein said surfaces being operative when selected to display further data correlated to said related securities.

17. (Original) A system for displaying data representing the operation of an exchange as specified in claim 16, wherein said alphanumeric images comprise identification of said securities.

18. (Original) A system for displaying data representing the operation of an exchange as specified in claim 15, wherein the computer system is further configured and programmed to:

analyze said data representing trading of said securities and identifying exceptional conditions relating thereto;

generate image portions representing said exceptional conditions; and

display said exceptional condition image portions in said two-dimensional display in correlation with said display of model portions representing said trading posts at which said securities are traded.

19. (Original) A system for displaying data representing the operation of an exchange as specified in claim 18 wherein said exceptional condition image portions are selectable and operative when selected to display further data concerning said exceptional condition.

20. (Original) A system for displaying data representing the operation of an exchange as specified in claim 15, wherein the computer system is further configured and programmed to:

monitor data processing systems used in said exchange;

identify exceptional conditions in said data processing systems and the locations of said exchange effected by said exceptional conditions;

generate image portions representing exceptional conditions of said data processing systems; and

display said exceptional condition image portions in said two dimensional display in correlation with said location of said exchange.

21. (Previously Presented) A system for displaying data representing the operation of an exchange as specified in claim 15, wherein the computer system is further configured and programmed to receive and maintain in a computer memory real time and historical data integrated from several sources representing trading of said securities.

22. (Previously Presented) A system for displaying data representing the operation of an exchange as specified in claim 15, wherein the computer system is further configured and programmed to receive and maintain in a computer memory real time and historical data integrated from several sources representing trading of said securities and normalized market data..

23. (Previously Presented) The method of claim 1, further comprising using the interactive decision support interface for at least one of:

ensuring and enforcing compliance with the trading exchange's financial and operational requirements;

checking on brokers' sales practices; and

monitoring specialist operations.

REMARKS

Background

Claims 1-23 are pending.

Claims 1-7 and 7-17 were rejected under 35 U.S.C. § 103(a) as allegedly obvious over “Real Liffe or Virtual Reality” by Ivy Schmerken, Wall Street & Technology, Vol. 15 (1), p. 70 (New York Jan. 1997) (“Schmerken”) in view of “Virtual Trading is Virtually a Reality” by Dean Tomasula, Wall Street & Technology, Vol. 13(10), p. 44 (New York Oct. 1995) (“Tomasula”). Claims 8-10 and 18-22 were rejected under 35 U.S.C. § 103(a) as allegedly obvious over Schmerken in view of Tomasula, and further in view of U.S. Patent No. 5,675,746 to Marshall (“Marshall”).

Applicants appealed these rejections to the Board of Patent Appeals and Interferences (“BPAI”). The BPAI affirmed the rejections in part. In particular, the BPAI overturned the rejection of claims 1-14 and 23, but upheld the Examiner’s rejection of claims 15-22.

Summary of Amendments

Applicants have amended independent claims 15 to clarify the claimed subject matter. In particular, Applicants have amended claim 15 to recite a system for displaying data representing the operation of a trading having a trading area including a plurality of trading posts whereat selected securities are traded, the system comprising, among other things, a “visual display of trading exchange activity including systems activity and trading activity.”

Applicants have also amended independent claim 11 to clarify the claimed subject matter.

Comments

The BPAI has overturned the rejection of claims 1-14 and 23. Applicants respectfully request allowance of claims 1-14 and 23 for the reasons set forth in previous communications between Applicants and the PTO, including the decision of the BPAI.

Applicants have amended independent claim 15 to incorporate the subject matter of independent claim 5. In particular, claim 15 now recites a system comprising, among other things, "a visual display of trading exchange activity including systems activity and trading activity." Applicants therefore respectfully submit that claim 15 is allowable at least for the same reasons as claim 5. Dependent claims 16-22 depend from independent claim 15, and should be allowed at least for depending from an allowable independent claim.

Applicants therefore respectfully request that claims 1-23 be allowed.

Conclusion

This application is now in condition for allowance. Reconsideration and prompt allowance are respectfully requested. If there are any remaining issues to be resolved, applicant respectfully requests the Examiner to kindly contact the undersigned attorney by telephone for an interview.

Applicants do not believe that any fees are due in connection with the submission of the present Amendment. If any fees are due, Applicants expressly authorize the Commissioner to charge any such fees and/or credit any overpayments associated with this submission to Baker Botts L.L.P. Deposit Account No. 02-4377, Ref. No. 070388.0620.

Respectfully submitted,  
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